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EPA Superfund
Explanation of Significant Differences:

DISTLER FARM and DISTLER BRICKYARD
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WEST POINT, KY
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

ESD

Explanation of Significant Differences in Components of the Remedies to be Implemented at the Distler Farm and Brickyard NPL Sites

OCT 26 1988

Introduction:

Based on additional information now available with regard to the Distler Farm and Distler Brickyard Superfund Sites, the U.S. Environmental Protection Agency has determined that it is necessary to make changes in the remedy selected in the Records of Decision (RODs) for the two sites. This document is an explanation of the differences between the remedies as originally specified in the RODs and the remedies as EPA proposes to implement them, and the reasons such changes were made.

Distler Farm Site Background

Site Description:

The Distler Farm property, a 13.68-acre farmland tract is located in the southwest corner of Jefferson County, Kentucky, approximately one mile northeast of West Point, Kentucky. The property is bordered by U.S. Highway 60/31W (Dixie Highway) on the northwest; Stump Gap Creek on the southeast; and by cultivated farmland on the northeast and southwest. It is approximately one mile northeast of the Salt River and the Ohio River confluence.

Drums and containers of industrial wastes were buried and stored on the surface within this property in an area of about three acres. This three-acre area is adjacent to the tree line along Stump Gap Creek and located about 200 feet from the southwestern property line and about 1000 feet from the Ohio River.

Site History:

The Distler Farm Site was discovered in early 1977 during the development of an enforcement case against Mr. Donald E. Distler, owner of Kentucky Liquid Recycling, Inc. In an effort to locate sites that Mr. Distler may have used for chemical waste storage or disposal, EPA personnel inspected the Distler Farm Site in 1977. They reported approximately 600 drums of industrial wastes stored on the surface.

In December 1978, the Ohio River and its tributaries flooded, causing drums of industrial wastes from the site to be scattered along the flood plain of Stump Gap Creek. A recovery and removal of 832 drums, containing chemicals characteristic of the paint and varnish industry, was performed by EPA Region IV and the Kentucky Natural Resources and Environmental Protection Cabinet (KNREPC). During the cleanup, four drum burial sites were located. Subsequently, EPA and KNREPC conducted a sampling program to determine if contamination of the environment had occurred. Private wells and surface waters from Stump Gap Creek showed no contamination from the site. However, soil in the area of the drum burial pits showed signs of contamination.

Following several studies performed in 1981 and 1982, the Distler Farm Site was ranked and listed on the National Priorities List (NPL) and a Remedial Investigation was begun by NUS Corporation in

September 1983. Investigation work was halted for two months while buried drums and waste containers from the four burial locations were removed and transported to permitted hazardous waste disposal facilities. The Remedial Investigation was completed in September 1984 and confirmed that contaminated soil and groundwater are present at the site but have not moved offsite. A draft Remedial Investigation/Feasibility Study report (available to the public in the West Point repository) was submitted to EPA in September 1985 and a public meeting to present a summary of the RI/FS process and to explain the proposed remedies was held on April 23, 1986. This public meeting initiated a three week public comment period in which the public was encouraged to review the proposed remedies and respond to EPA.

In August 1986, EPA prepared a Record of Decision (ROD) taking into consideration comments from the public and the results of the RI/FS. The ROD (available to the public in the West Point repository) specified the remedial action to include:

-- Excavate contaminated soils to background levels, remove and dispose in an offsite permitted hazardous waste landfill.

-- Backfill with "clean" natural granular soils, grade to existing grade and revegetate.

-- Extract contaminated groundwater, temporarily accumulate and store onsite.

-- Transport contaminated groundwater to offsite commercial facility, treat to background levels.

-- Reinject uncontaminated water into the aquifer.

-- Mow and maintain vegetation and repair any erosion, and monitor groundwater for a period of one year.

Distler Brickyard Site Background

Site Description:

The Distler Brickyard Site is located near the Ohio River, approximately one-half mile south of West Point, Kentucky and about 17 miles southwest of Louisville, Kentucky. It is located on a 70-acre abandoned brick manufacturing plant property, which is divided by Dixie Highway (U.S. Route 60/31w). Waste storage activities have occurred within a three-acre area on the eastern half of the property, east of the highway.

Site History:

The Hardin County Brick and Tile Company operated the brick manufacturing plant from the 1950's through the mid-1970's.

Kentucky Liquid Recycling Inc., founded by Mr. Donald Distler, leased the Brickyard property from the owner, Mr. Thomas Hoeppner, and began transporting wastes to the site in the fall of 1976.

Kentucky Natural Resources and Environmental Protection Cabinet (KNREPC) first learned of the waste storage activities at the Brickyard property in December 1976. In April 1977, the EPA and KNREPC conducted an initial site inspection. Subsequently, the Franklin Circuit Court served a restraining order on Mr. Distler prohibiting storage or disposal of industrial wastes at the Brickyard property. Despite the restraining order, active storage operations apparently continued until January 1979, when KNREPC issued an Order to Abate and Alleviate Operations. This action prompted a partial removal of drummed wastes from the property. Apparently no additional wastes were brought onto the property after that time. Between January 1979, and December 1981, KNREPC issued several follow up orders to Mr. Distler for removal of the industrial wastes stored on the property. No action resulted.

In March 1982, EPA removed 2310 drums from the site. Some contaminated soils from onsite spills were also removed at this time. In March 1983, EPA completed subsurface investigations to determine if contaminated groundwater existed at the site.

Based on this initial study, a Remedial Investigation began in April 1984. The RI confirmed the presence of contaminated soils and groundwater at the site. Further investigations have confirmed that no significant site-related contamination has yet appeared in surface waste, sediment, or residential wells outside the property boundaries. Site investigations were completed in September 1984 and the RI/FS report (available to the public in the West Point repository) was submitted to the EPA in September 1985. A public meeting to present a summary of the RI/FS process and to explain the proposed remedies for the clean-up of the site was held on April 22, 1986.

This public meeting initiated a three week public comment period in which the public was encouraged to review the proposed remedies presented in the Feasibility Study and respond to EPA.

In August 1983, EPA prepared a Record of Decision (ROD) taking into consideration comments from the public and the results of the RI/FS.

The ROD (available to the public in the West Point repository) recommended the remedial action to include:

-- Excavate contaminated soils to background levels, remove and dispose in an offsite permitted hazardous waste landfill.

-- Backfill with "clean" natural granular soils, grade to existing grade and revegetate.

-- Extraction and treatment of contaminated groundwater to background levels and reinjection into the aquifer

-- Mowing and maintenance of vegetation and repair of any erosion for a period of one year.

Change in the Records of Decision

The Records of Decision for these two sites required, at the request of the State of Kentucky, remediation of soil and groundwater to background levels. Background levels were defined as the minimum quantity detectable by the analytical instrument used. After determining the difficulty of attaining the required background levels, USEPA assessed alternate clean-up levels that would still attain the same degree of health protection.

To determine alternate cleanup levels, drinking water standards were utilized, and a Soil Remediation Study was prepared for each of the Distler sites. These two studies calculated what soil concentrations would insure that water moving through the soil into the drinking water aquifer beneath the site would not contain contaminant concentrations higher than health-based standards for drinking water. The Soil Remediation Studies calculating the soil concentrations required at each Distler Site to meet this criteria are detailed in Attachments A and B.

Based on Drinking Water Standards and the Soil Remediation Studies, EPA, with the concurrence of the Commonwealth of Kentucky (Attachments C and D), is changing the implementation of the remedies from what was orginally outlined in the Records of Decision to require excavatioa of soil and remediation of groundwater to levels set by the following health based methods:

Soils will be excavated to insure that no water leaching into the aquifer underlying the sites will exceed the health based values given below.

Groundwater will be remediated to the Drinking Water Standards and the health based Maximum Concentration Limits given below.

The health based groundwater levels are as follows:

Contaminant	Health Based Contaminant Concentration of ppb (ug/kg)
arsenic	50
chromium	50
lead	50
2–butanone	170

trans-1,2–dichloroethene	70
1,1,1–trichloroethane	200
trichloroethylene	5
benzene	5
toluene	2000
1,1–dichloroethylene	7

This change in the Records of Decision will still require the excavation of heavily contaminated soil at the Distler Brickyard site. However, soil concentrations at the Distler Farm site are below the levels that would cause groundwater concentrations to be greater than drinking water standards. For this reason, along with a determination from the Agency for Toxic Substances and Disease Registry (ATSDR) that the concentrations on site pose no threat to the public in the event of direct contact (Attachment E), it was determined that no soil excavation would be necessary at the Distler Farm site.

Groundwater treatment will still be necessary at both of the sites.

Comments from the Public

The public may submit written comments on the foregoing changes until December 2, 1988. Comments will be summarized and responses provided in a Responsiveness Summary that will be placed in the Information Repositories and Administrative Records of each site. The public can send comments to or obtain further information from:

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